IN THE CLAIMS:

1. (Currently Amended) A curable organopolysiloxane resin composition for optical waveguides, said composition comprising:

(A) an organopolysiloxane resin, which is represented by the average unit formula (1):

$$(R^1{}_3SiO_{1/2})_a(R^2{}_2SiO_{2/2})_b(R^3SiO_{3/2})_c(SiO_{4/2})_d \qquad (1)$$

(wherein R^1, R^2, and R^3 stand for one, two, or more kinds of monovalent hydrocarbon groups selected from monovalent aliphatic hydrocarbon groups having 1 to 6 carbon atoms and monovalent aromatic hydrocarbon groups having 6 to 10 carbon atoms, $0<a\leq0.5$, $0\leq b<0.2$, $0.3\leq c<1$, $0\leq d\leq0.4$, $0\leq(b+d)/(a+c)\leq0.25$, and $a+b+c+d=1$) and has three or more monovalent unsaturated aliphatic hydrocarbon groups per molecule, with not less than 10 mol% of the monovalent hydrocarbon groups being monovalent aromatic hydrocarbon groups,

(B) an organosilicon compound having two or more silicon-bonded hydrogen atoms per molecule, with not less than 5 mol% of all the silicon-bonded monovalent substituent groups being monovalent aromatic hydrocarbon groups, and

(C) a hydrosilation catalyst.

2. (Original) The curable organopolysiloxane resin composition for optical waveguides according to claim 1, wherein the viscosity of the composition is not more than 1×10^7 mPa·s at 25°C.

3. (Currently Amended) A curable organopolysiloxane resin composition for optical waveguides, said composition comprising:

(A) an organopolysiloxane resin, which is represented by the average unit formula (1):

$$(R^1{}_3SiO_{1/2})_a(R^2{}_2SiO_{2/2})_b(R^3SiO_{3/2})_c(SiO_{4/2})_d \qquad (1)$$

(wherein ~~R^1, R^2, and R^3, a, b, c, d, (b+d)/(a+c), and a+b+c+d are the same as above~~ R^1, R^2, and R^3 stand for one, two, or more kinds of monovalent hydrocarbon groups selected from monovalent aliphatic hydrocarbon groups having 1 to 6 carbon atoms and

monovalent aromatic hydrocarbon groups having 6 to 10 carbon atoms, $0<a\leq0.5$, $0\leq b<0.2$, $0.3\leq c<1$, $0\leq d\leq0.4$, $0\leq(b+d)/(a+c)\leq0.25$, and $a+b+c+d=1$) and has three or more monovalent unsaturated aliphatic hydrocarbon groups per molecule, with not less than 10 mol% of the monovalent hydrocarbon groups being monovalent aromatic hydrocarbon groups,

(B) an organosilicon compound having two or more silicon-bonded hydrogen atoms per molecule, with not less than 5 mol% of all the silicon-bonded monovalent substituent groups being monovalent aromatic hydrocarbon groups,

(C) a hydrosilation catalyst, and

(D) (d1) a solvent or (d2) a hydrosilation-reactive organosiloxane-based diluent.

4. (Currently Amended) An optical waveguide comprising a hydrosilation-cured product of:

(A) an organopolysiloxane resin, which is represented by the average unit formula (1):

$$(R^1{}_3SiO_{1/2})_a(R^2{}_2SiO_{2/2})_b(R^3SiO_{3/2})_c(SiO_{4/2})_d \qquad (1)$$

(wherein R^1, R^2, and R^3 stand for one, two, or more kinds of monovalent hydrocarbon groups selected from monovalent aliphatic hydrocarbon groups having 1 to 6 carbon atoms and monovalent aromatic hydrocarbon groups having 6 to 10 carbon atoms, $0<a\leq0.5$, $0\leq b<0.2$, $0.3\leq c<1$, $0\leq d\leq0.4$, $0\leq(b+d)/(a+c)\leq0.25$, and $a+b+c+d=1$) and has three or more monovalent unsaturated aliphatic hydrocarbon groups per molecule, with not less than 10 mol% of the monovalent hydrocarbon groups being monovalent aromatic hydrocarbon groups, and

(B) an organosilicon compound having two or more silicon-bonded hydrogen atoms per molecule, with not less than 5 mol% of all the silicon-bonded monovalent substituent groups being monovalent aromatic hydrocarbon groups.

5. (Currently Amended) An optical waveguide comprising a hydrosilation-cured product of:

(A) an organopolysiloxane resin, which is represented by the average unit formula (1):

$$(R^1{}_3SiO_{1/2})_a(R^2{}_2SiO_{2/2})_b(R^3SiO_{3/2})_c(SiO_{4/2})_d \qquad (1)$$

(wherein ~~R^1, R^2, R^3, a, b, c, d, (b+d)/(a+c), and a+b+c+d are the as described above~~ R^1, R^2, and R^3 stand for one, two, or more kinds of monovalent hydrocarbon groups selected from monovalent aliphatic hydrocarbon groups having 1 to 6 carbon atoms and monovalent aromatic hydrocarbon groups having 6 to 10 carbon atoms, $0<a\leq 0.5$, $0\leq b<0.2$, $0.3\leq c<1$, $0\leq d\leq 0.4$, $0\leq(b+d)/(a+c)\leq 0.25$, and $a+b+c+d=1$) and has three or more monovalent unsaturated aliphatic hydrocarbon groups per molecule, with not less than 10 mol% of the monovalent hydrocarbon groups being monovalent aromatic hydrocarbon groups,

(B) an organosilicon compound having two or more silicon-bonded hydrogen atoms per molecule, with not less than 5 mol% of all the silicon-bonded monovalent substituent groups being monovalent aromatic hydrocarbon groups, and

(d2) a hydrosilation-reactive organosiloxane-based diluent.

Claims 6-7 (Cancelled)

8. (Currently Amended) The optical waveguide according to claim 4, wherein both [[the]] a cladding and [[the]] a core of the optical waveguide ~~consist of~~ comprise a hydrosilation-cured product of component (A) and component (B), with the refractive index of the core being at least 0.1% higher than the refractive index of the cladding.

9. (Currently Amended) The optical waveguide according to claim 5, wherein both [[the]] a cladding and [[the]] a core of the optical waveguide ~~consist of~~ comprise a hydrosilation-cured product of component (A), component (B), and component (d2), with the refractive index of the core being at least 0.1% higher than the refractive index of the cladding.

10. (Original) The optical waveguide according to claim 8, wherein the refractive index difference is regulated by making the total content of monovalent

aromatic hydrocarbon groups in component (A) and component (B) used for the core higher than the total content of monovalent aromatic hydrocarbon groups in component (A) and component (B) used for the cladding.

11. (Original) The optical waveguide according to claim 9, wherein the refractive index difference is regulated by making the total content of monovalent aromatic hydrocarbon groups in component (A), component (B), and component (d2) used for the core higher than the total content of monovalent aromatic hydrocarbon groups in component (A), component (B), and component (d2) used for the cladding.

12. (Currently Amended) The optical waveguide according to ~~any of claims 4, 5, 8 to 11~~ claim 4, ~~which~~ wherein the optical waveguide has a film-like shape.

13. (Currently Amended) A process for fabricating an optical waveguide using the curable organopolysiloxane resin composition of claim 1, wherein ~~the curable organopolysiloxane resin~~ the composition ~~for optical waveguides s according to any of claim 1 to claim 3~~ is cured by heating.

14. (Currently Amended) A process for fabricating an optical waveguide using the curable organopolysiloxane resin composition of claim 1, wherein ~~the curable organopolysiloxane resin~~ the composition ~~for optical waveguides according to any of claim 1 to claim 3~~ is applied to a substrate and cured by heating.

15. (Currently Amended) A process for fabricating a slab optical waveguide, said process comprising;

applying ~~in which a~~ the curable organopolysiloxane resin composition ~~for optical waveguides (1) according to any~~ of claim 1 ~~to claim 3 is applied~~ to a substrate and ~~cured~~ curing by heating, and

applying a second curable organopolysiloxane resin composition ~~for optical waveguides (2)~~, whose cured product has a refractive index at least 0.1% higher than that of the ~~above-mentioned~~ composition of claim 1, ~~(1), is applied~~ to the cured product

~~thereof~~ of the composition of claim 1 and ~~cured~~ curing the second composition by heating, and

applying ~~whereupon~~ the ~~aforementioned~~ composition of claim 1 ~~(1) is applied~~ to the cured product ~~thereof~~ of the second composition and ~~cured~~ curing the composition of claim 1 by heating.

16. (Currently Amended) A process for fabricating an optical waveguide, wherein the curable organopolysiloxane resin composition ~~for optical waveguides according to any~~ of claim 1 ~~to claim 3~~ is casted into a mold having a desired inner surface shape and cured by heating.

17. (Currently Amended) A process for fabricating an optical waveguide, said process comprising;

casting ~~wherein ① a~~ the curable organopolysiloxane resin composition ~~for optical waveguides (3) according to any~~ of claim 1 ~~to claim 3 is cast~~ into a mold having on its inner surface protrusions corresponding to [[the]] a core of the optical waveguide and ~~cured~~ curing by heating,

removing [[②]] the molding ~~is removed~~ from the mold,

casting [[③]] a second curable organopolysiloxane resin composition ~~for optical waveguides (4) according to any of claim 1 to claim 3~~, whose cured product has a refractive index at least 0.1% higher than that of the ~~aforementioned~~ composition of claim 1, ~~(3), is cast~~ into the hollow portion of the cured product removed from the mold and ~~cured~~ curing the second composition by heating, and

applying ~~whereupon ④~~ the ~~aforementioned~~ composition of claim 1 ~~(3) is applied~~ on top of the cured product of the second ~~aforementioned~~ composition [[(4)]] and the cured product of the ~~aforementioned~~ composition of claim 1 [[(3)]] and ~~cured~~ curing the composition of claim 1 by heating.

Please add the following new claims.

18. (New) The optical waveguide according to claim 5, wherein said optical waveguide has a film-like shape.

19. (New) A process for fabricating an optical waveguide using the curable organopolysiloxane resin composition of claim 3, wherein the composition is cured by heating.

20. (New) A process for fabricating an optical waveguide using the curable organopolysiloxane resin composition of claim 3, wherein the composition is applied to a substrate and cured by heating.

21. (New) A process for fabricating a slab optical waveguide, said process comprising;

applying the curable organopolysiloxane resin composition of claim 3 to a substrate and curing by heating, and

applying a second curable organopolysiloxane resin composition, whose cured product has a refractive index at least 0.1% higher than that of the composition of claim 3, to the cured product of the composition of claim 3 and curing the second composition by heating, and

applying the composition of claim 3 to the cured product of the second composition and curing the composition of claim 3 by heating.

22. (New) A process for fabricating an optical waveguide, wherein the curable organopolysiloxane resin composition of claim 3 is casted into a mold having a desired inner surface shape and cured by heating.

23. (New) A process for fabricating an optical waveguide, said process comprising;

casting the curable organopolysiloxane resin composition of claim 3 into a mold having on its inner surface protrusions corresponding to a core of the optical waveguide and curing by heating,

removing the molding from the mold,

casting a second curable organopolysiloxane resin composition, whose cured product has a refractive index at least 0.1% higher than that of the composition of claim 3, into the hollow portion of the cured product removed from the mold and curing the second composition by heating, and

applying the composition of claim 3 on top of the cured product of the second composition and the cured product of the composition of claim 3 and curing the composition of claim 3 by heating.